UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/527,656	12/07/2009	Roger Pellenc	1811-273	6977

24106 7590 04/28/2017

Egbert Law Offices, PLLC
1001 Texas Ave., Suite 1250
HOUSTON, TX 77002

EXAMINER
NGUYEN, PHONG H

ART UNIT	PAPER NUMBER
3724	

NOTIFICATION DATE	DELIVERY MODE
04/28/2017	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

MAIL@EGBERTLAWOFFICES.COM
KMCDANIEL@EGBERTLAWOFFICES.COM

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROGER PELLENC

Appeal 2015-004824
Application 12/527,656
Technology Center 3700

Before JAMES P. CALVE, WILLIAM A. CAPP, and
SEAN P. O'HANLON, *Administrative Patent Judges*.

O'HANLON, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Roger Pellenc (Appellant)[1] appeals under 35 U.S.C. § 134 from the Examiner's March 19, 2014 final decision ("Final Act.") rejecting claims 17 and 19–32.[2] We have jurisdiction over this appeal under 35 U.S.C. § 6(b).

We REVERSE.

---

[1] According to Appellant, the real party in interest is PELLENC (Societe Anonyme). Br. 5.

[2] Claims 1–16 and 18 are canceled. *Id.* at 8, 23 (Claims App.).

SUMMARY OF THE INVENTION

Appellant's disclosure is directed to "a static cooling electric chain saw." Spec. ¶ 1.[3] Claim 17, reproduced below from page 23 (Claims Appendix) of the Appeal Brief, is illustrative of the claimed subject matter:

> 17. An electric chain saw apparatus comprising:
>
> a guide bar of an oblong shape;
>
> a cutting chain fitted around said guide bar;
>
> a drive sprocket drivingly connected to said cutting chain as to rotate said cutting chain around said guide bar;
>
> a housing formed of a light metallic alloy, said housing having a first component and a second component;
>
> a brushless direct current motor enclosed in said housing, said motor drivingly connected to said drive sprocket, said motor being in direct contact with a surface of said housing so as to provide static cooling of said motor; and
>
> an electronic control card cooperative with said motor, said electronic control card positioned in said housing such that a surface of said housing is in direct contact with a commutation component of said electronic control card.

REJECTIONS

Claims 17, 19–22, and 26–32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jong (US 2003/0088987 A1, pub. May 15, 2003), Sandvik (EP 0 024 268 A1, pub. Feb. 25, 1981),[4] Lui (US 7,109,613 B2, iss. Sept. 19, 2006),[5] Tasaki (US 5,212,886, iss. May 25, 1993), and Nozaki (US 2004/0089260 A1, pub. May 13, 2004).

---

[3] Citations herein to the Specification refer to the Substitute Specification filed on Aug. 18, 2009.

[4] Although the first-named inventor of this application is John E. Jones, we refer to it herein as "Sandvik" in keeping with the Examiner's nomenclature.

[5] We note that both the Examiner and Appellant mistakenly refer to this reference as "Liu" throughout the record. We further note that Appellant

Claims 23–25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jong, Sandvik, Lui, Tasaki, Nozaki, and Siede (US 4,964,217, iss. Oct. 23, 1990).

ANALYSIS

Rejection Based on Jong, Sandvik, Lui, Tasaki, and Nozaki

Regarding independent claim 17, the Examiner finds that Jong discloses a chainsaw having a cutting chain fitted to rotate around a drive sprocket and a guide bar, and an electric motor (including a stator) enclosed within a housing. Final Act. 2. The Examiner determines that it is inherent that the stator is mounted to the housing. *Id.* The Examiner finds that Jong does not disclose the motor being a brushless motor, but finds that Sandvik teaches such a motor being "advantageous for chainsaws because of the varying load and frequent need to operate on battery power alone." *Id.* at 2–3. The Examiner reasons that it would have been obvious to one of ordinary skill to use a brushless motor with Jong's chainsaw "because the brushless direct current motor works well with the chainsaw." *Id.* at 3. The Examiner determines that "the brushless direct current motor inherently has an electric control card." *Id.* The Examiner further determines that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the electronic control card to the housing, since it has been held that rearranging parts of an invention involves only routine skill in the art." *Id.* (citing *In re Japikse*, 181 F.2d 1019 (CCPA 1950)).

---

references the published application version of this reference in the Specification. *See* Spec. ¶ 6.

Alternatively, the Examiner reasons that "because the control card is outside of the motor, the card must be secured to the housing." *Id.* The Examiner finds that Lui teaches using high thermal conductivity material for cooling a motor, and that Tasaki and Nozaki teach making the bodies of the chainsaw housings of light metallic alloys having high thermal conductivity—namely, magnesium alloy and aluminum alloy, respectively. *Id.* at 3–4. The Examiner reasons that it would have been obvious to one of ordinary skill "to use light metallic alloy such as magnesium alloy or aluminum for making the housing of the chainsaw due to its light weight and quick cooling property." *Id.* at 4.

Appellant traverses, arguing that "the devices of the cited prior art do not utilize static cooling." Br. 15. Appellant explains that "static cooling is accomplished by . . . a brushless direct current motor . . . in direct contact with the surface of the housing." *Id.* Appellant argues that "because the body of [Jong's chain] saw is made of a polymeric material, including the engine compartment, there would be little need for cooling of the engine by static cooling with contact between the motor and the light metallic alloy housing." *Id.* at 16. Appellant also argues that none of the other cited references disclose static heating. *Id.* at 17.

Similarly, Appellant argues that "the prior art combination fails to show or suggest that the motor of the chain saw is in direct contact with the housing to establish heat exchange." *Id.* at 18. Appellant argues that, contrary to the Examiner's findings, Jong Figure 1 does not show "an electric motor in direct contact with the surface of the body of the chain saw." *Id.*

Initially, we construe the term "static cooling." During examination of a patent application, pending claims are given their broadest reasonable construction consistent with the specification. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Therefore, we construe "static cooling" to mean heat transfer by conduction, convection, and/or radiation without the use of a fan (forced convection) or other supplemental heat transfer components. *See, e.g.*, Spec. ¶¶ 9, 25, 40, 42. For example, claim 17 requires the motor to be in direct contact with the housing (Br. 23 (Claims App.)), so heat is transferred (via conduction) directly from the motor to the housing and dissipated therefrom (via convection and/or radiation).

We are persuaded of error in the Examiner's determination that Jong discloses "[the] motor being in direct contact with a surface of [the] housing so as to provide static cooling of said motor" as required by claim 17. In support of this contention, the Examiner determines that Jong's "motor case is mounted directly to a housing of a device *by a bracket* to provide a proper alignment between the output shaft and the gear." Ans. 8 (emphasis added); *see also id.* at 10. We find error in this interpretation because the Examiner has not given appropriate consideration to the requirement that the motor be *in direct contact* with the housing. Connection of the motor to the housing via a bracket does not constitute the motor being in direct contact with the housing. We further note that the Specification differentiates Appellant's apparatus from such an indirect motor-housing connection. *See* Spec. ¶ 6 (discussing Lui's bracket 240); *see also In re Man Mach. Interface Techs. LLC*, 822 F.3d 1282, 1286 (Fed. Cir. 2016) ("The broadest reasonable interpretation of a claim term cannot be so broad as to include a configuration expressly

disclaimed in the specification."). We further disagree with the Examiner's unsupported contention that "[t]he brackets are a part of the motor." Ans. 11; *see also id.* at 8 (setting forth that "[i]t is well known in the art that the basic components of a motor comprise a motor case, a stator and a rotor having an output shaft," but not brackets). The Examiner does not rely on any of Sandvik, Lui, Tasaki, or Nozaki in any manner that would remedy the deficiencies noted above.

Accordingly, we do not sustain the rejection of claim 17 nor of its dependent claims 19–22, 26, 27, 29,[6] or 30 as being unpatentable over Jong, Sandvik, Lui, Tasaki, and Nozaki.

Similarly to claim 17, independent claim 28 recites "said motor being in direct contact with a surface of said housing so as to provide static cooling of said motor." Br. 24–25 (Claims App.). According, for the same reasons as discussed above with respect to the rejection of claim 17, we do not sustain the rejection of claim 28 as being unpatentable over Jong, Sandvik, Lui, Tasaki, and Nozaki.

Similarly to claim 17, independent claim 31 recites "placing said motor in said housing such that said motor has a surface in direct contact with at least one surface of said housing" and "statically cooling said motor by heat conductance to the surface of said housing." *Id.* at 25 (Claims App.) (underlining omitted).

Accordingly, for the same reasons as discussed above with respect to the rejection of claim 17, we do not sustain the rejection of claim 31 nor of its

---

[6] We note that claim 29 contains a typographical error in that the claim depends from canceled claim 18. Br. 25 (Claims App.). We assume that it was intended that claim 29 depend from claim 17 (*see* Amendment 8–9 (filed Dec. 23, 2013)) and consider this oversight to be harmless error. In the event of further prosecution of this application, Appellant and the Examiner may wish to consider taking appropriate action to correct this informality.

dependent claim 32 as being unpatentable over Jong, Sandvik, Lui, Tasaki, and Nozaki.

Rejection Based on Jong, Sandvik, Lui, Tasaki, Nozaki, and Siede

Claims 23–25 depend from claim 17. Br. 24 (Claims App.). The Examiner does not rely on Siede in any manner that would remedy the deficiencies noted above with respect to the proposed combination of Jong, Sandvik, Lui, Tasaki, and Nozaki. Thus, for the same reasons as discussed above with respect to the rejection of claim 17, we do not sustain the rejection of claims 23–25 as being unpatentable over Jong, Sandvik, Lui, Tasaki, Nozaki, and Siede.

DECISION

The Examiner's decision to reject claims 17 and 19–32 is reversed.

REVERSED